

Types of Educational Research

descriptive research, correlational research, and experimental research.

Descriptive Educational Research

In this type of educational research, the researcher merely seeks to collect data with regards to the status quo or present situation of things. The core of descriptive research lies in defining the state and characteristics of the research subject being understudied.

Because of its emphasis on the “what” of the situation, descriptive research can be termed an observational research method.

In descriptive educational research, the researcher makes use of quantitative research methods including surveys and questionnaires to gather the required data.

Here are a few examples of descriptive research:

A reading program to help you understand student literacy levels.

A study of students’ classroom performance.

Research to gather data on students’ interests and preferences.

the researcher does not need to create a simulation of the natural environment of the research subjects; rather, he or she observes them as they engage in their routines. Also, the researcher is not concerned with creating a causal relationship between the research variables.

Correlational Educational Research

This is a type of educational research that seeks insights into the statistical relationship between two research variables.

In correlational research, the researcher studies two variables intending to establish a connection between them.

Correlational research can be positive, negative, or non-existent. Positive correlation occurs when an increase in variable A leads to an increase in variable B, while negative correlation occurs when an increase in variable A results in a decrease in variable B.

When a change in any of the variables does not trigger a succeeding change in the other, then the correlation is non-existent.

Also, in correlational educational research, the research does not need to alter the natural environment of the variables; that is, there is no need for external conditioning.

Examples of educational correlational research include:

Research to discover the relationship between students' behaviors and classroom performance.

A study into the relationship between students' social skills and their learning behaviors.

Experimental Educational Research

Experimental educational research is a research approach that seeks to establish the causal relationship between two variables in the research environment. It adopts quantitative research methods in order to determine the cause and effect in terms of the research variables being studied.

Experimental educational research typically involves two groups – the control group and the experimental group. The researcher introduces some changes to the experimental group such as a change in environment or a catalyst, while the control group is left in its natural state.

The introduction of these catalysts allows the researcher to determine the causative factor(s) in the experiment. At the core of experimental educational research lies the formulation of a hypothesis and so, the overall research design relies on statistical analysis to approve or disprove this hypothesis.

Examples of Experimental Educational Research

A study to determine the best teaching and learning methods in a school.

A study to understand how extracurricular activities affect the learning process.

educational research can be classified into fundamental research, applied research, and action research. The primary purpose of fundamental research is to provide insights into the research variables; that is, to gain more knowledge. Fundamental research does not solve any specific problems.

Just as the name suggests, applied research is a research approach that seeks to solve specific problems. Findings from applied research are useful in solving practical challenges in the educational sector such as improving teaching methods, modifying learning curricula, and simplifying pedagogy.

Action research is tailored to solve immediate problems that are specific to a context such as educational challenges in a local primary school. The goal of action research is to proffer solutions that work in this context and to solve general or universal challenges in the educational sector.

Importance of Educational Research

Educational research plays a crucial role in knowledge advancement across different fields of study.

It provides answers to practical educational challenges using scientific methods.

Findings from educational research; especially applied research, are instrumental in policy reformulation.

For the researcher and other parties involved in this research approach, educational research improves learning, knowledge, skills, and understanding.

Educational research improves teaching and learning methods by empowering you with data to help you teach and lead more strategically and effectively.

Educational research helps students apply their knowledge to practical situations.

Educational Research Methods

Surveys/Questionnaires

A survey is a research method that is used to collect data from a predetermined audience about a specific research context. It usually consists of a set of standardized questions that help you to gain insights into the experiences, thoughts, and behaviors of the audience.

Surveys can be administered physically using paper forms, face-to-face conversations, telephone conversations, or online forms. Online forms are easier to administer because they help you to collect accurate data and to also reach a larger sample size. Creating your online survey on data-gathering platforms like Formplus allows you to also analyze survey respondent's data easily.

In order to gather accurate data via your survey, you must first identify the research context and the research subjects that would make up your data sample size. Next, you need to choose an online survey tool like Formplus to help you create and administer your survey with little or no hassles.

Interviews

An interview is a qualitative data collection method that helps you to gather information from respondents by asking questions in a conversation. It is typically a face-to-face conversation with the research subjects in order to gather insights that will prove useful to the specific research context.

Interviews can be structured, semi-structured, or unstructured. A structured interview is a type of interview that follows a premeditated sequence; that is, it makes use of a set of standardized questions to gather information from the research subjects.

An unstructured interview is a type of interview that is fluid; that is, it is non-directive. During a structured interview, the researcher does not make use of a set of predetermined questions rather, he or she spontaneously asks questions to gather relevant data from the respondents.

A semi-structured interview is the mid-point between structured and unstructured interviews. Here, the researcher makes use of a set of standardized questions yet, he or she still makes inquiries outside these premeditated questions as dedicated by the flow of the conversations in the research context.

Data from Interviews can be collected using audio recorders, digital cameras, surveys, and questionnaires.

Observation

Observation is a method of data collection that entails systematically selecting, watching, listening, reading, touching, and recording behaviors and characteristics of living beings, objects, or phenomena. In the classroom, teachers can adopt this method to understand students' behaviors in different contexts.

Observation can be qualitative or quantitative in approach. In quantitative observation, the researcher aims at collecting statistical information from respondents and in qualitative information, the researcher aims at collecting qualitative data from respondents.

Qualitative observation can further be classified into participant or non-participant observation. In participant observation, the researcher becomes a part of the research environment and interacts with the research subjects to gather info about their behaviors. In non-participant observation, the researcher does not actively take part in the research environment; that is, he or she is a passive observer.

Steps in Educational Research

Like other types of research, educational research involves several steps. Following these steps allows the researcher to gather objective information and arrive at valid findings that are useful to the research context.

Define the research problem clearly.

Formulate your hypothesis. A hypothesis is the researcher's reasonable guess based on the available evidence, which he or she seeks to prove in the course of the research.

Determine the methodology to be adopted. Educational research methods include interviews, surveys, and questionnaires.

Collect data from the research subjects using one or more educational research methods. You can collect research data using Formplus forms.

Analyze and interpret your data to arrive at valid findings. In the Formplus analytics dashboard, you can view important data collection insights and you can also create custom visual reports with the reports summary tool.

Create your research report. A research report details the entire process of the systematic investigation plus the research findings.

Conclusion

Educational research is crucial to the overall advancement of different fields of study and learning, as a whole. Data in educational research can be gathered via surveys and questionnaires, observation methods, or interviews – structured, unstructured, and semi-structured.

You can create a survey/questionnaire for educational research with Formplus. As a top-tier data tool, Form plus makes it easy for you to create your educational research survey in the drag-and-drop form builder, and share this with survey respondents using one or more of the form sharing options.